

UNITED STATE DEPARTMENT OF COMMERCE **Patent and Trademark Office** Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 **FILING DATE FIRST NAMED INVENTOR** ATTORNEY DOCKET NO. 12/10/96 POSSIDENTO Ы **EXAMINER** 13M1/0429 JOHN P HALVONIK ART UNIT THE PAPER NUMBER 845 QUINCE ORCHARD BLVD STE E GAITHERSBURG MD 20878 1312 DATE MAILED: 04/29/97 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS Responsive to communication filed on____ This action is made final. This application has been examined S A shortened statutory period for response to this action is set to expire month(s),_ days from the date of this letter. Fallure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133 Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION: Notice of References Cited by Examiner, PTO-892. 1. of Draftsman's Patent Drawing Review, PTO-948. 3. Notice of Art Cited by Applicant, PTO-1449. Notice of Informal Patent Application, PTO-152. 5. Information on How to Effect Drawing Changes, PTO-1474. Part II SUMMARY OF ACTION are pending in the application. Of the above, claims are withdrawn from consideration.

2. Claims Claims 5. L Claims are objected to. 6. Claims are subject to restriction or election requirement. This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes. 8. Formal drawings are required in response to this Office action. 9. The corrected or substitute drawings have been received on _ . Under 37 C.F.R. 1.84 these drawings are acceptable; not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948). 10. The proposed additional or substitute sheet(s) of drawings, filed on ... has (have) been approved by the examiner; disapproved by the examiner (see explanation). 11. The proposed drawing correction, filed __, has been approved; disapproved (see explanation). 12. Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has been received not been received Deen filed in parent application, serial no. ; filed on 13. Since this application apppears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. 14. Other

MINER'S ACTION

PTOL-326 (Rev. 2/93)

Serial Number: 762,717 -2-

Art Unit: 1312

The abstract of the disclosure is objected to because of the inclusion of legal phraseology often used in patent claims. For examples: "comprising" recited at line 3, "comprise" recited at line 9 and "means for" recited at lines 11 and 12 of the Abstract. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: (a) in the Description of Drawings: Figures 1-4 as described are in incomplete sentences. (b) Note typographical error:

"vaccuum" recited in claim 5, line 2

Applicant should further check for any typographical errors in the instant application.

(c) Grammatical error, for example: page 5, line 16 "Figure 2 and 3 shows" should be --Figures 2 and 3 show-.

Appropriate correction is required.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the vacuum forming means" recited in claims 5 and 11 and the "focusing means" recited in claims 6 and 12 the should be noted that the vacuum forming means and the focusing means recited in claims 5 and 11 and 6-12 respectively if shown in drawings should also be incorporated into the specification with the associated reference materials, must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered.

Serial Number: 762,717 -3-

Art Unit: 1312

Claims 4 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are no proper antecedent basis for supports in the claims for "said radiation" recited in claims 4 and 9.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over #e Hay's Publication and Kruse.

The Hay's (publication) discloses a distillation device comprising" an enclosed still with central axis for holding liquids, said still having an upper section, said upper section having a cover of "V" shape, said "V" shape having an apex portion of the "V" and an open portion of the "V", said apex portion (e.g., Figure 2) pointed in the direction of said central axis of said still, a trough portion running parallel to said central axis, said trough portion of curved surface so as to collect liquids that condense on said upper section and fall into said trough portion (page 2).

The device of Hay differs from the claimed invention in that claim 1, for example, recites an "outer tube having a cross section of ovoid construction". However, said

Serial Number: 762,717

Art Unit: 1312

difference is deemed not to constitute a patentable distinction inasmuch as the claimed ovoid construction is deemed to be a matter of engineering design choice. Nonetheless, Kruse shows a solar still of ovoid construction. To use the evaporation tube of Kruse as the still basin in Hay's structure would have been obvious to one of ordinary skill in the art as such is conventionally done in the art and inasmuch as Hay suggests that the still basins can be of the alone o

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

France '281 discloses an apparatus for the recovery of clean water using solar energy for evaporation.

Su '351 shows a trough distillate collector along the base perimeter.

Australian '679 discloses a solar still.

The German '495 discloses a rr plant with trough having a glass cover of V-shape.

The german '427 and Hay both disclose a procedure and device for desalinating sea water.

JP '833 uses two --- lenses arranged to focus sunshine onto the water.

Any inquiry concerning this communication should be directed to V. Manoharan at telephone number (703) 308-3844.

V. Manoharan:jp

April 23, 1997

VIRGINIA MANOHARAN PRIMARY EXAMINER ART UNIT 13%

4/28/97

-4-